C.O. Dir. File Copy

Southern Regional Research Laboratory
New Orleans 19, Louisiana
November 19, 1947

To: Director and Laboratory Staff
From: Survey and Appraisal Section, Cotton Processing Division
Subject: SURVEY NOTES

1948 AGRICULTURAL OUTLOOK

"The demand for farm products in 1948 is expected to continue generally strong. Prices of farm products and income from farming, although increasingly subject to fluctuations arising principally from uncertainties in the foreign situation, may average as high as the record levels of this year. Basic demand factors in the domestic economy, which were important in maintaining the extraordinary high level of output and employment in 1947, are likely to remain strong during most or all of 1948." With prices continuing to rise and speculation increasing, industrial uncertainties, etc., an "inflationary psychology may develop in 1948 which might result in a further price boom to be followed by a reaction."

Demand and Price Situation, BAE, 1948 Outlook Issue, October 22.

LINT COTTON

COTTON CROP ESTIMATE

According to the November 1st cotton report, this year's cotton crop will total 11,505,000 bales, including 1.0 thousand bales of American-Egyptian cotton. Indicated yield per harvested acre of Upland cotton is 261 pounds, as compared with 235 pounds in 1946, and 251 pounds average during 1935-46. California has the highest yield per acre, 618 pounds; Oklahoma the lowest, 141 pounds. Grade is the highest for any recent year, with 31 percent of ginnings through October 31st classed as Strict Middling or better (white or extra white), as compared with 10 percent in 1946. Average staple is 32.0 32nd inches, as compared with 32.8 32nd inches last year.

BAE and PMA Reports.

1948 COTTON OUTLOOK

It appears that farmers will receive more than 2 billion dollars from the 1947-48 cotton crop, 29 percent more than last year, nearly 3 times the 1935-39 average, and the most since 1919.

United States cotton supplies are the smallest since 1923, with the reduction of 4.8 million bales since last year in the carryover more than offsetting the increase of 2.6 million bales over last year in production. Domestic consumption in 1947-48 is expected to total 8-3/4 million bales and exports (including Marshall plan shipments) to total 2.6 million bales, leaving a carryover on August 1, 1948 of 2.6 million bales, only slightly more than this year. (This seems to spell out a very tight cotton situation with prices continuing at high levels.)

Cotton Situation, 1948 Outlook Issue, October 23.

COTTON CONSUMPTION AND MILL ACTIVITY

Cotton consumption in September was down 11 percent from a year ago but gained over August and July. Spindle hours, however, were higher than a

year ago, probably indicating production of lighter fabrics.

Table 1.- Cotton consumption and stocks, and spindle hours in cotton mills

	September 1947	August 1947	September 1946	September 1940
Consumption, bales	727,448	710,601	818,449	638,235
On hand, 1000 bales	3,721	1,987	6,285	11,532
Active spindle hours, billions	9.4	9.0	9.0	7.9
Spindle activity, percent of 80-hour capacity	114.3	112.9	114.4	96.8

WORLD COTTON CARRYOVER DECLINES DRASTICALLY

World cotton stocks as of July 31, 1947 were estimated by OFAR at only 17.9 million bales as compared with 24.8 million bales on July 31, 1946 and 28.5 million bales in 1945. World cotton consumption has been running 5 to 6 million bales per year in excess of the comparatively low cotton production of the last two years.

Weekly Cotton Market Review, November 14, 1947.

COTTON PRICES RISE; MILL MARGINS AT NEW HIGH LEVELS

Cotton prices advanced half a cent a pound last week. Cotton is now 5.77 cents higher than viscose staple. Mill margins reached new high levels in September. As indicated in table 2, mill margins for print cloths in September were three times as great as a year ago, but margins for ducks and drills increased less than 50 percent. (Mill margins are the difference between the cost of a pound of raw cotton and the price of the fabric made from it). This substantiates rumors that print cloth mills currently are making very large profits.

Table 2.- Prices of raw cotton, rayon staple, and cotton fabrics, and cotton mill margins in cents

	November 13 1947	September 1947	August 1947	September 1946	Average 1939-40
Cotton, Middling 15/16" delivered at mills, lb.	34.25	33.09	36.51	38.24	11.01
Rayon, viscose staple equivalent price 1/, lb.	28.48	28.48	28.48	22.25	22.25
Cotton fabrics, average 17 constructions 2/	-	89.13	88.00	63.53	22.86
Mill margins 3/					
Average, 17 cotton fabrics	-	57.91	53.96	27.14	12.68
Average, 6 printcloths	-	89.81	84.03	30.27	10.55
Average, 3 sheetings	-	43.27	40.48	20.74	9.60
Average, 4 drills	-	33.55	30.37	23.38	9.90
Average, 2 ducks	-	34.00	31.07	25.65	13.10

1/ Cost to mill of same amount of usable fiber as supplied by one pound of cotton (rayon price x.89).
2/ Price of approximate quantity of cloth obtainable from a pound of cotton with adjustments for saleable wastes.
3/ Difference between cloth prices and prices (10 market average) of cotton assumed to be used in each kind of cloth.

PREMIUMS FOR LONG STAPLES SUBSTANTIALLY HIGHER

Premiums for long staple cotton have increased very substantially during the past few months. For 1-1/4" cotton the premium averaged 1,004 points (10.04 cents over base price for M 15/16) in October, as compared with 475 points in July and 544 points a year ago. For 1-3/16" staple, it was 748 points in October, as compared with 375 points in July and 454 points a year ago. Premiums and discounts affecting grades are down slightly from October 1946 levels; discounts for short staples are about the same.

Based on PMA Reports.

SMITH-DOXEY ACT COTTON ACREAGE REACHES 64 %

The U. S. Department of Agriculture announced today that about 64 percent of this year's cotton acreage was planted by members of groups organized under the Smith-Doxey Act of 1937. This is the highest percentage to date. Both the membership and reported acreage of these improvement groups showed substantial increases for this year over 1946. Membership rose from 343,704 to 350,105 and total acreage increased from 11-1/2 million to about 13-3/4 million. Texas has well over one-fourth of the total membership this year with 94,309; Mississippi is second with 57,630; and Alabama, third with 31,670. In the far western States of California, Arizona, and New Mexico nearly all producers are members of these groups.

Cotton Trade Journal, October 10, 1947, page 1.

DELTAPINE, STONEVILLE, AND COKER NOW PRINCIPAL VARIETIES IN DELTA

Ninety percent of cotton produced in Delta is of three varieties—Deltapine, Stoneville, and Coker. Very little extra-staple cotton, 1-1/4 inches and longer, is grown. Tests at Delta Experiment Station during 1944-46 showed "that a cotton variety, 1-1/4 inches in staple length, produced about two-thirds as much lint per acre as the shorter varieties now planted," that total money value per acre was $30 less than for the extra long staple variety of the same grade, and that lower grades and extra expense are involved in growing the extra long staple cotton.

From address on "Supply of Staple Cotton" by Francis L. Gerdes, USDA as quoted in Journal of Commerce, October 10, 1947, page 3A.

NEPS BEING BRED OUT OF CALIFORNIA ACALA

Acala 1517, introduced from the New Mexico State Experiment Station, has been the mainstay of San Joaquin Valley growers since 1944, but it is to be replaced by Acala 4-42. George J. Harrison, in charge of breeding work at the U. S. Cotton Experiment Station, Shafter, California," has been able to practically breed out of the older Acala variety the formidable defect known as "neps." Working first with Acala 1517 and then with Acala 4-42 (1-1/16 to 1-1/8-inch cottons), neppiness has been reduced from 36 per hundred fibers formerly to 12 last season, and more recently 7. This is said to bring "Acala into direct competition with Delta cottons of similar lengths which Harrison finds under laboratory test have 10 to 12 neps per 100 fibers." Acala 4-42 also exceeds Delta Pine and Stoneville cotton in tensile strength with 93,000 pounds versus 76,000 pounds. The Experiment Station's 80-acre plot of Acala cotton has an average yield of close to 3 bales to the acre. A number of planters in the San Joaquin Valley are

reported to harvest crops "averaging around 2 bales per acre on anywhere from 1,000 to 3,000 acres. California's type of cotton production seems likely to become a challenge to older sections of South," (Victor Schoffelmayer, Cotton Trade Journal, October 10, 1947, page 9.)

"What does it cost to raise cotton in the San Joaquin Valley?....I got different replies but in the main the answer should be around 16 to 18 cents a pound." Cotton pickers are expected to reduce the cost of gathering the crop from $35 per bale to $4 or $5.

Cotton Trade Journal, October 17, 1947, page 8.

USES OF SHORT, HARSH COTTON SURVEYED BY TARIFF COMMISSION

According to a report published this year by the Tariff Commission, "imported short harsh cotton enters into certain specialized uses to which domestic cotton is unsuited, but it also enters into other uses where very short staple, or low grade domestic cotton, might be employed." Among uses mentioned of short harsh Asiatic cotton are:

Blankets - Quantity used ranges from 40,000 to 80,000 480-lb. net bales annually. Asiatic cotton is too short to spin on conventional cotton system machinery, and is made into roving which is twisted around yarns made of American cotton. It comprises two-thirds to three-fourths of the weight of the blankets, producing a nap "which is more or less permanently erect." It is "claimed to take dye more readily and to afford brighter colors than longer-soft cotton."

Mattresses - Quantity used has increased from less than 10,000 bales per year to 50,000 bales or more in 1945-46. Increase was due to high prices and shortages of linters and cotton-mill wastes.

Upholstery - Employed mostly in loose cushions used for seats of upholstered furniture, where a felt with considerable toughness and resiliency is required. It comprises less than 10 percent of the material used in upholstery, "even in factories where it is used."

Automotive batts - Use prescribed by a few makers of high-priced and custom built cars. Also used in some assembly plants on west coast. Comprises 10 to 30 percent of mix made up mostly of cotton linters, but is believed to represent less than 1 percent of the total filling materials employed. American cotton used for this purpose under Government diversion program.

Filters (milk and industrial) - Now requires 20,000 bales of Asiatic cotton annually and use increasing. One large manufacturer of milk filters uses 40 percent Asiatic, 60 percent American cotton, the former giving the filter greater dirt retention qualities and greater speed in operation. Use of Asiatic cotton for this purpose is new since 1939.

Shoulder pads - Quantity used ranges from 8,000 to 17,000 bales per year. Consist of a layer of cotton stitched between two pieces of fabric. Soft American cotton, lacking stiffness and resiliency, is not satisfactory.

Quilts, comforters, and interlinings - Not more than 4,000 to 6,000 bales of total of possibly 80,000 to 100,000 bales of cotton per year.

Surgical and other uses - Small quantities used in dressings, etc., and as white roving for stuffing into necks of bottles.

Short Harsh Cotton, United States Tariff Commission Washington, 1947, 72 pages.

COTTON TEXTILE INDUSTRY

SANFORIZED PATENTS TO EXPIRE IN 1949

About 60 percent of Cluett, Peabody & Co.'s gross income is from the Sanforized process, which now is licensed to 83 concerns in the United States, 5 in Canada, and others elsewhere. Basic patents on "Sanforized" processes expire on May 31, 1949 and on the mechanisms on August 21, 1959, but revenues are expected to continue since the widely-advertised "Sanforized" trade mark is owned by the company. "Sanforset" for rayon and similar fabrics is now licensed to 12 rayon cloth finishers. In addition, the company has an option to become the exclusive licensee for a stabilization process on woolen fabrics, developed by others, on which development work is now being conducted.

Journal of Commerce, October 6, 1947, page 9.

SWISS WARP TYING MACHINE INTRODUCED

Dr. Benno Bissig, manager of the textile machinery department of Zellweger Ltd., of Switzerland, is introducing into the United States their "Little Uster" warp tying machine which will tye 200 to 300 knots per minute, and which is said to be more efficient than present machines in U. S. It is on display at American Viscose Corp., Marcus Hook, and at textile schools in Raleigh, N. C., and in New England.

Journal of Commerce, October 21, 1947, page 16.

COTTON PRODUCTS

OUTPUT OF COTTON BROAD WOVEN GOODS

A total of 2,466 million linear yards of cotton broad woven goods was produced during April-June 1947, as compared with 2,474 million linear yards during the first quarter. (Second quarter data were not released until October 13). Production of duck, towels, and specialties declined substantially while there was a substantial increase in napped fabrics and a small increase in print cloths, as compared with the previous quarter.

COTTON TEXTILE PRICE SITUATION NOTED

According to Russell T. Fisher, Secretary of the National Association of Cotton Manufacturers (New England), "Some fabrics such as denims are still selling at ceiling prices." On others, it "has been necessary to raise prices." "On a few products, such as certain ranges of carded sales yarn, the present selling price is below the last ceiling." "On many constructions supply is reasonably near demand, but on others, particularly in the

combed goods line, there are still accumulated shortages."
Journal of Commerce, October 10, 1947, page 1A.

PRODUCTION OF COTTON AND RAYON TIRE FABRICS

Production of tire fabric and cord totaled slightly less during the second quarter of 1947 than the first (table 3), but was at a greater rate than for any previous year. Cotton's percentage of the total was 63.9 percent, as compared to 61.9 percent during January-March 1947, 59.4 percent in 1946, 53.0 percent in 1945, and 83.9 percent in 1943. Of the tire cord and fabric produced during the first half of 1947, nearly 14 million pounds (shipping weight) of the cotton cord and fabric, and more than 7 million pounds (shipping weight) of "cord tire and fuel cell fabrics of synthetic fibers" were exported. These export shipments were not large enough to materially change cotton's percentage of tire fabrics used from its percentage of tire fabrics produced.

Table 3.- Production of tire fabric, United States, 1944-1946

(In thousands of pounds)

Year	Cotton				Rayon and nylon			
	Tire cord fabrics woven	Chafer & all other fabrics	Tire cord not woven	Total	Cord & others fabrics	Tire cord not woven	Total	Total
1943	148,464	36,450	54,462	239,376	41,257	4,843	46,100	285,476
1944	155,932	44,954	64,357	265,243	94,961	7,267	102,228	367,471
1945	160,818	52,889	63,365	277,072	170,594	11,339	181,933	459,005
1946	161,501	74,363	74,689	310,553	212,200		212,200 1/	522,753 1/
1947								
1st.qtr.	49,377	21,815	21,972	93,164	52,059	5,322	57,381	150,545
2nd.qtr.	52,945	16,480	23,491	92,916	47,067	5,486	52,553	145,469

1/ Including small quantity of rayon fuel cell fabrics.
Compiled from Facts for Industry, Bureau of the Census.

TIRE PRICES TO GO UP; TIRE PRODUCTION CONTINUES HIGH

Increases of 8 percent to 12 percent in tire prices are expected in the near future as a result of rising natural rubber prices , higher freight rates, higher coal prices, and substantial increases in wages in the tire industry. Since Sears and Montgomery Ward "precipitated" an average 10 percent cut in tire prices last June, prices have been below 1941 levels, but rubber manufacturers' profits are reported to have been seriously cut. The spot price of natural rubber declined from 23-1/2 cents to 14 cents last May when government control was ended, but recently has risen to 24 cents, under government stock pile operations, and is expected to go still higher. Expected slump in demand for tires in last half of 1947 has failed to materialize, and production is expected to total well over the 90 million mark, as compared with 87 million units last year, and 52 million units during the first six months of 1947.

NON-WOVEN DIAPERS PLANNED

Henry H. Fride & Co. is going to install equipment costing $75,000 to produce non-woven fabric for 480,000 disposable diapers per day. Price has not

been set, but it may be around 2 cents each. The unwoven fabric called "Steraton" also will be used for bassinet sheets, towels, napkins, washcloths, bibs, and aprons. A four-month test with diapers made at a pilot plant has been run in a Chattanooga hospital.

Daily News Record, October 23, 1947, page 24.

ARMED FORCES NEED CLOTHING TO SHIELD AGAINST RADIOACTIVITY; BETTER COLD WEATHER CLOTHING

Two major textile problems confront the armed forces today, according to Brig. General L. E. Rea, commanding officer of U. S. Marine Corps QM depot in Philadelphia: (1) Some new fabric or finishing procedure must be developed as a protective shield against the radioactivity that comes with atomic warfare. Such protection would be required by "a large segment of the civilian population" as well as by the armed forces. (2) Suitable cold weather clothing is needed for our armed forces. Both the Army and Navy have made experiments with men billeted in Artic regions and found that presently available clothing is "absolutely worthless" for satisfactory operations under such conditions.

Talk before Civic Appeal Campaign Committee of Philadelphia Textile Institute Foundation. Reported in Daily News Record, October 29, 1947, page 1.

LABELING REQUIRED FOR WASTE IN MATTRESSES IN CALIFORNIA

The California Bureau of Furniture and Bedding Inspection is putting into effect a regulation which would require manufacturing waste, when used as stuffing for mattresses, to be labeled as waste. Several cotton associations are endeavoring to have the term "Raw Cotton By-Product" used instead.

Journal of Commerce, October 10, 1947, page 2A.

U. S. RUBBER EXPANDING TEXTILE DIVISION

John W. Solomon has been appointed general sales manager of the textile division of U. S. Rubber Co. "His appointment follows expansion of the textile division of the company and development of new postwar products. These products include Strex, a stretchable all-textile fabric; Ustex, a cotton yarn possessing high strength and low stretch properties; Asbeston, fire-resistant fabric for ironing board covers, etc.; Carosel, high-absorbing fabric for dish towels; and asbestos-glass fire-resistant fabrics for decorative use."

Journal of Commerce, October 14, 1947, page 10.

COMPETITIVE MATERIALS

CRIMPED VISCOSE STAPLE INTRODUCED BY AMERICAN VISCOSE CORP.

A crimped rayon staple is now in production by American Viscose Company. It comes in either dull or bright and in a variety of denier and staple lengths. It can be used by itself or blended and "will be used most effectively where a warm bulk-without-weight fabric is needed as in blankets." It is also stated that it will give a livelier hand "to higher twist fabrics such as garbardines." Tests are said to have proved the staple provides greater durability and added strength to a fabric.

Daily News Record, October 29, 1947, page 15.

RAYON MACHINERY COSTS UP 35 PERCENT SINCE 1939.-

Building of new rayon plants by "vertical weavers or organizations other than present producers is being contemplated." If this eventuates it will be the first time newcomers have entered the rayon field in many years. Cost of rayon producing machinery has increased about 35 percent since 1939.

Journal of Commerce, October 22, 1947, page 14.

SARAN TO APPEAR SOON AS FINE FILAMENTS

Saran, which already has appeared as monofilaments in screening, upholstery, women's handbags, etc., is now to be spun into "gossamer-sheer, soft-to-the touch fabrics." First fabrics will be directed into draperies and upholstery. "But it is suggested this fibre eventually will find its way into clothing—particularly when blended with other fibres, both natural and synthetic." The new Saran fiber will be made by the Saran Yarn Co., a jointly owned subsidiary of Dow Chemical and National Plastics Products Co., which is building a new plant at Odenton, Maryland. It is expected to be in operation early next year, producing both yarns and short staple fibre from Saran. So far Saran in these forms has been available only for experimental purposes. Saran plastic, discovered by Dow Chemical, is vinylidene chloride. Its raw materials are petroleum and chlorine. "Saran is one of the cheapest of plastics. It may eventually become one of the low-priced textile fibres. In the beginning Saran fibre yarn is expected to cost somewhere between rayon and nylon."

Wall Street Journal, October 23, 1947, page 1.

US WOOL RESEARCH HELD OPENING WAY FOR GREATER USE

Washington, Oct. 21.- Research into ways to modify the characteristics of domestic wools, so that they may better meet competition from foreign wools and synthetic fibers, has been approved by E. A. Meyer, administrator of the Research and Marketing Act, the United States Department of Agriculture announced today. The project will be carried out by the Bureau of Agricultural and Industrial Chemistry at it's Western Regional Research Laboratory, Albany, Calif. In the research studies, wools of various types, including the more important imported wools, will be studied as to physical structure, physical properties, and chemical composition. Information so acquired will be used in studies on modifying wool fibers so that they can better meet general as well as specific requirements. Samples of wool of known origin and characteristics from experimental flocks at various experiment stations will be given special attention.

Journal of Commerce, October 22, 1947, page 15.

PROCESS FOR WOOL SHRINKAGE CONTROL TO BE LICENSED BY CLUETT, PEABODY

Cluett, Peabody & Co. has made an agreement with Wolsey, Ltd. and Stevenson (Dyers) Ltd. of England to license and promote the latter's process for controlling wool shrinkage. "The new process controls shrinkage by chemically neutralizing the normal felting property of wool. The non-felting characteristic of the treated fiber is said to be completely permanent under normal laundering conditions." "Extended commercial tests now being conducted bear out the English contention that the process is superior to any other procedure heretofore developed."

Journal of Commerce, October 21, 1947, page 17.

NYLON AND SPORTS

According to an article in the Dupont Magazine, nylon is being used in the sports world for such purposes as sails for small boats; rope for mountain climbing and cowboy lassos; saddle girths for race horses and race suits for jockeys; socks and pants for football suits; bags for golf clubs; bathing suits; and fishing line.

Dupont Magazine, Aug-Sept. 1947, page 8.

INCREASED OUTPUT OF NYLON SLIPS PLANNED

Textron Inc. has embarked on an extensive program for the production of women's slips made of tricot knit nylon, thereby combining wrinkle-proof qualities of tricot cloth and the quick-drying properties of nylon. Royal Little predicted the same acceptance as accorded nylon hosiery. The new slips are said to require no ironing and will "neither shrink, sag, bag, cling, or run," and it's silk-like finish has the advantage of a durability that silk never had.

Daily News Record, October 30, 1947, page 11.

In a demonstration in Textron's New York offices, a light weight slip dried in 11-1/2 minutes with the aid of an electric fan. Textron has equipped a plant at East Greenwich, R.I. with the latest tricot-knitting machines and is employing 350 people to make finished goods of the new fabric.

Journal of Commerce, October 30, 1947, page 16.

NYLON REPLACES COTTON IN GOODRICH TRANSVERSE BELT

Nylon is now being used in Goodrich's patented transverse cord breaker, one of the most important features in its cord conveyer belt. The breaker consists of a layer of parallel cords imbedded in a rubber transversely laid on the belt. Nylon is said to have as good or better adhesion qualities as the cotton cord formerly employed; to be 55 percent stronger with only half the thickness; and to have more than twice the stretch and recovery before the breaking point. Other advantages include resistance to mildew and to weak acids and alkalies.

Daily News Record, November 5, 1947, page 35.

GLASS BINDER TWINE BEING DEVELOPED

Researchers at International Harvester's new research center "are experimenting with a twine made from fibre glass for baling hay. Baling twine for years has been mainly from sisal which is imported. The glass twine costs much less than that made from sisal, but the researchers still aren't sure just what will happen if a cow happens to munch a piece of fibre glass along with her hay."

Wall Street Journal, October 22, 1947, page 1.

FIBERGLAS INSULATION BANNED IN PLANES

The Civil Aeronautics Administration has ordered the removal of all glass fiber insulation from baggage compartments of Douglas DC-6 planes. This "precautionary measure" was taken because the pads may act as a wick for gasoline leakage.

Daily News Record, November 8, 1947, page 16.

NEW GLASS FIBER PRODUCER STARTS OPERATIONS

The plant of Glass Fibers, Inc., at Waterville, Ohio, has started production of glass fiber according to R. H. Barnard, president. An entirely new process is reported used, radio frequency current being used to provide heat to melt the glass spheres from which the fibers are drawn. The plant now employs 125.

Daily News Record, October 30, 1947, page 13.

TEXTILE RESEARCH NOTES

RESEARCH PROJECTS AT I.T.T. LISTED

Staff of the Institute of Textile Technology now numbers over 100, and 68 projects are actively under way. Approximately 40 percent of the projects are purely fundamental in nature; 40 percent are practical or applied in nature; 10 percent are in the field of instrumentation; and 10 percent are in the field of technical service and consultation. These researches are all paid for from general funds. Following are a few of the 68 projects on which they are presently engaged:

Stream Sanitation and Pollution Studies
Effect of Hydrogen Ion Concentration on Cellulose and Cellulosic Materials
Biological Deterioration of Textiles and Textile Materials
Interpretation of Viscosimetric Data
Chemical Modification of Cotton Fibers, Yarns and Fabrics
Longitudinal Sectioning of Fabrics, and Microscopic Examination of the Sections
Analysis of Limiting Factors in Textile Processing Equipment
Study of Caustic Soda Recovery
Survey of Modern Methods of Heating and Drying Textile Materials
Electrostatic Phenomena
Investigation of Methods of Measuring Moisture Content and Relative Humidity
Study of the Adhesives Suitable for Use in the Textile Industry
Crease Resistance.

Article "Textile Research Now Reported as Hitting New Peak," Journal of Commerce, October 10, 1947, page 6A.

According to an editorial in the Textile Bulletin (October 1, 1947), the Institute of Textile Technology has spent $1,413,623.95 during the four years of its existance, including $644,533.48 for plant and equipment, and $769,090.47 for other, including costs of sponsored projects.

INDUSTRIAL RESEARCH INSTITUTE AT CHATTANOOGA EXPANDING

In its two years' existance, the Industrial Research Institute of the University of Chattanooga has grown from an idea to a modern-designed brick plant, with $250,000 worth of equipment and a staff of 10 scientists with industrial research experience. Plans now are being completed for a new two-story brick building that will house 30 3-man laboratories and a library and also provide instructions for a graduate school in chemistry. "For the first time," Dr. (Raymond B.) Seymour (director) declared, "the small manufacturer of the South can get material and processing problems handled by scientific methods right at home and at a cost that enables him to compete with

the large organizations that maintain self-contained laboratories." The U. S. Navy has awarded two peacetime projects to the institute, one on woven textiles as reenforcing agents for plastics, and the other for increasing the surface hardness of plastics. The institute also is studying purified linters as reenforcing agents for plastics. The full time staff is now engaged in the investigation of problems on sugar, wood, paper, adhesives, pharmaceuticals, bonded fibers, plastics, cotton wool, candy, nylon, horticulture, ceramics, cast iron alloys, aluminum, sand, space heaters, coffee, glass, electronics, and cellulose.

COTTONSEED AND PEANUTS

PRICES OF VEGETABLE OILS AND MEALS

Prices of edible vegetable oils have risen very substantially this fall and now are near the levels of last November. The price for linseed oil has remained relatively unchanged, while tung oil prices are much lower than last year.

Table 4.- Prices of vegetable oils and meals

	November 10 1947 1/	October 13 1947	September 8 1947	November 11 1946	September 26 1946
			Cents per pound		
Oils 2/					
Cottonseed oil	24.0	22.0	16.5	26.0	12.5
Peanut oil	25.0	24.5	17.0	27.0	12.9
Soybean oil	22.0	21.0	15.5	23.0	12.5
Corn oil	24.5	24.0	18.0	26.0	12.8
Coconut oil 3/	20.5	19.0	13.0	24.0	-
Linseed oil 4/	30.6	31.1	29.4	32.5	18.0
Tung oil 5/	26.0	26.0	24.6	38.4	38.4
			Dollars per ton		
MEALS 6/					
Cottonseed meal 7/	87.00	85.00	86.00	90.00	48.50
Peanut meal 8/	87.50	90.00	90.00	90.00	68.00
Soybean meal 9/	88.00	85.00	90.50	97.00	63.25
Coconut meal 10/	84.00	83.00	74.50	82.50	55.50
Linseed meal 11/	83.00	84.50	84.50	95.00	56.00

1/ Meal quotations on November 1, 1947.
2/ Crude, tanks, f.o.b. mills except as noted. Oil, Paint & Drug Reporter.
3/ Crude, tanks, Pacific Coast.
4/ Raw, tanks, N. Y.
5/ Tanks, N. Y.
6/ Bagged, carlots. As given in Feedstuffs.
7/ 41 percent protein, Memphis.
8/ 45 percent protein, S.E. Mills.
9/ 41 percent protein, Chicago.
10/ 19 percent protein, Los Angeles.
11/ 32 percent protein, Minneapolis.

PEANUT PRODUCTION AT HIGH LEVELS

It is expected that 2,125 million pounds of peanuts will be picked and threshed this year, as compared with 2,036 million pounds last year and a 1936-45 average of 1,673 million pounds. This is the sixth consecutive year of production exceeding 2 billion pounds. Yield per acre this year is 685 pounds, compared with 649 pounds last year and a 1936-45 average of 719 pounds. Peanut production is up about 86 million pounds in the Virginia - North Carolina area, up 64 million pounds in the Southeastern area, and down 60 million pounds in the Southwestern area.

Crop Production, BAE, November 12, 1947.

COTTONSEED PRODUCTS OBTAINED PER TON OF SEED CRUSHED

Linters cut per ton of seed crushed at oil mills averaged 198 pounds during the 1946-47 season, the highest recovery rate on record, and 47 pounds more than the average for 1935-39. There was little change in the yields of crude oil and of cake and meal (table 5).

Table 5.- Cottonseed products obtained per ton of seed crushed, 1930-46

Season beginning August 1st	Crude oil	Cake and meal	Hulls	Linters	Other including waste	Total
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Averages						
1935-39	311	904	514	151	120	2,000
1940-44	314	899	483	182	122	2,000
1945	312	879	480	188	141	2,000
1946	315	882	471	198	134	2,000
	Percent	Percent	Percent	Percent	Percent	Percent
Averages						
1935-39	15.5	45.2	25.7	7.6	6.0	100.0
1940-44	15.7	45.0	24.1	9.1	6.1	100.0
1945	15.6	43.9	24.0	9.4	7.1	100.0
1946	15.8	44.1	23.5	9.9	6.7	100.0

Source: Weekly Cotton Linters Review, October 31, 1947.

L I N T E R S A N D C E L L U L O S E

PRICES OF LINTERS AND OF LINTERS PULP ADVANCE

Prices of grade 6 linters have advanced from 5.5 cents to 6.5 cents per pound f.o.b. oil mills. Linters pulp increased from 12.15 cents to 13.45 cents at the end of the month, with an average price for October of about 12.50 cents f.o.b. pulp plant.

Table 6.- Prices of dissolving wood pulp and purified linters

Cents per pound

	Wood pulp 1/			Purified linters 2/
	Standard viscose grade	High-t. viscose grade	Acetate & cupra grade	
1947, January	6.60	6.92	7.40	19.00
February	6.95	7.35	7.90	17.00
March	6.95	7.35	7.90	14.50
April	6.95	7.35	7.90	14.50
May	6.95	7.35	7.90	14.50
June	6.95	7.35	7.90	14.50
July	7.10	7.55	8.20	14.50
August	7.10	7.55	8.20	12.50
September	7.10	7.55	8.20	11.50
October	7.10	7.55	8.20	12.50

1/ Compiled from Rayon Organon and from letters to us from producers. Wood pulp prices are f.o.b. domestic producing mill, freight equalized with that Atlantic or Gulf port carrying lowest backhaul rate to destination plus 3 percent of backhaul charges.

2/ Compiled from letters to us from a producer. F.o.b. pulp plant.

PRICES OF DOMESTIC DISSOLVING WOOD PULP REMAIN UNCHANGED

Prices for domestically produced dissolving wood pulp are expected to remain at $142 during the first quarter of 1948, based on policy of domestic producers "to charge only on the basis of the relationship between costs and prices; not to charge what the market will bear." However, "the combination of short supply and increased labor costs (up 10.8 cents an hour so far in 1947) will probably have its effect sometime in 1948." In the meantime, Swedish wood pulp rose in price from $187.50 in the third quarter to $210 in the fourth quarter and is expected to go still higher in 1948. The increases are caused by worldwide shortages of pulp combined with shortages of coal and power in Sweden. Domestic supplies of dissolving wood pulp are appreciably larger than last year because of an increase of 9,000 tons over the monthly production in 1946 plus larger imports from Canada, but the current rate of increase is not adequate to the potential demand. Acetate yarn producers are expected to take advantage of an anticipated increase of 10,000 more tons of linters available this year over last year.

Journal of Commerce, October 31, 1947, page 10.

R I C E

RICE PRODUCERS FACE DECLINING MARKET

U.S. rice producers are having their most prosperous year in 1947 with both production and prices at record levels. Production will total 2.2 billion pounds of milled rice this year, 50 percent more than in 1940, while Southern rice growers are getting $14 per 100 pounds, as compared with around $5.50 prewar. The outlook for the future, however, is gloomy. Much of the crop has been going into exports, but it is expected that this market will

be largely cut off as production in the Orient, already up to 90 percent prewar, gets back to normal, and as competition is felt from increasing South American production. Efforts to increase per capita consumption in the United States have been "less than spectacular." Southerners eat 20 pounds of rice per year and the national average is only some 5 pounds per year, as compared with 350 pounds per year in Japan.

Wall Street Journal, November 6, 1947, page 1.

This year's rice production is estimated at 76.9 million bushels, as compared with 71.5 million bushels last year and a 1936-45 average of 58.2 million bushels. Yields are not up to expectation in the South because of the hurricane and shortages of moisture late in the growing season.

Crop Production, BAE, November 12, 1947 Release

S W E E T P O T A T O E S

SWEETPOTATO CROP SMALL WITH LOW PER ACRE YIELDS

The 58.3 million bushel sweetpotato crop is somewhat lower than expected before harvest, and is 13 percent smaller than last year, and 9 percent below the 1936-45 average. Average yield per acre is 90.3 pounds, as compared with 98.3 pounds in 1946 and 87.2 pounds average during 1936-45. Above average yields are being realized in New Jersey and the South Atlantic States, but yields elsewhere are generally below average.